

1-6: Rewriting Formulas

Warm-up: 1. Suppose $f(w) = 3 - (4 - 6w)$. Find w when $f(w) = 113$.

2. $y = 3x + 4z$.

a. Find x when $y = 2$ and $z = 3$.

b. Find z when $y = 2$ and $x = 3$.

Question: Suppose we kept working with the problem in #2. Is there a way to make the problem easier to work with if we kept getting different values for x and y ?

Solve for a variable:

“in terms of”:

Example 1: a. Solve $b = \frac{2A}{h}$ for h in terms of b and A .

b. Solve $b = \frac{2A}{h}$ for A in terms of b and h .

Example 2: Solve $C = 2\pi r$ for r .

Example 3: Solve the formula $h = -\frac{1}{2}gt^2 + v_0t + h_0$ for v_0 .

Homework:

“Every artist was first an amateur.” - Ralph Waldo Emerson